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FORAGE NEWS



Research & Education Center
Princeton, KY 42445

For more forage information, visit our UK Forage Extension Website at: <http://www.uky.edu/Ag/Forage>

April 2013

Garry D. Lacefield and S. Ray Smith, Extension Forage Specialists • Christi Forsythe, Secretary

KENTUCKY GRAZING SCHOOL

The Spring Kentucky Grazing School will be held April 17-18 at the University of Kentucky Research & Education Center in Princeton. The two-day school features U.K. faculty and staff, NRCS Specialists, Industry personnel and farmers as leaders and speakers. Cost for the two-day school is \$50.00 which includes notebook, all conference materials, breaks and two lunches. To sign up, call Lyndsay Jones at 859-257-7512 or e-mail land.dale@uky.edu. For a list of speakers and topics along with directions, see our website [http://www.uky.edu/Ag/Forage/Princeton%202013%20brochure%20\(2\).pdf](http://www.uky.edu/Ag/Forage/Princeton%202013%20brochure%20(2).pdf)

SCLEROTINIA CROWN AND STEM ROT OF ALFALFA

Some alfalfa stands seeded in late summer, 2012, are showing activity of Sclerotinia crown and stem rot, caused by *Sclerotinia trifoliorum*. This disease is distinct from the Sclerotinia white mold disease (caused by *Sclerotinia sclerotiorum*) that attacks many crops including tobacco. The Sclerotinia fungus that attacks alfalfa becomes active in mid- to late autumn, and young alfalfa seedlings are often highly susceptible to the disease. The stand losses it can cause vary from minor to very severe (Figure 1).



Figure 1. Complete stand loss from a severe outbreak of Sclerotinia crown and stem rot of alfalfa.

Mid-February is quite early for detection of Sclerotinia crown and stem rot in forage legumes, which is a trend we have noted in recent years in the diagnostic lab. Earlier detection is consistent with our changing climate.

If the disease is present and currently active, you may find white, filamentous fungal growth coming from crowns of dying/dead plants during humid weather. If this is the case, reseeding a forage legume is very risky. Even if you can't find the filamentous growth, if you notice wilting and dying plants, it is risky to reseed a forage legume, because the fungus will resume activity and attack the seedlings when weather permits.

If the stand is basically already 98-100% dead and dried up, with no white, filamentous fungal growth, producers sometimes successfully establish alfalfa by reseeding in the spring. However, usually the best approach is to seed with a non-legume forage crop. For seedlings made before April 15-20, cool-season grasses are an option; seedlings past May 1 should be sown to summer annuals.

Complete resistance to Sclerotinia is not available in any commercial alfalfa varieties, but partial resistance can reduce stand

loss caused by this disease. If considering a late-summer seeding on affected farms, it is important to use a variety that has been shown to exhibit partial resistance under field conditions in Kentucky. This is important because some of the worst disease pressure from Sclerotinia crown and stem rot in the nation is in Kentucky. Variety evaluations conducted in other states are useful, but if a variety hasn't been tested for resistance under Kentucky, it hasn't been adequately tested for use in Kentucky.

The variety Phoenix has been shown to have a significant level of Sclerotinia resistance under Kentucky conditions, so that is certainly one to consider for late-summer plantings. Cimarron SR is also a good choice from the standpoint of Sclerotinia. Be aware that these varieties can still suffer stand loss from the disease, but they will suffer considerably less stand loss than the many susceptible varieties on the market. Certain alfalfa varieties marketed as having some resistance to Sclerotinia haven't held up well under Kentucky conditions.

More information on risk factors that favor Sclerotinia on alfalfa is available at

http://www.ca.uky.edu/agcollege/plantpathology/ext_files/PPFShtml/PPFS-AG-F-2.pdf. (SOURCE: Paul Vincelli IN Kentucky Pest News, Number 1330, February 12, 2013)

OUR EXPERIENCE WITH ROUNDUP READY ALFALFA

We raise approximately 500 acres of alfalfa with approximately 175 seeded to Roundup Ready varieties. We established our first field in 2006 and a second in 2007. Roundup Ready alfalfa was not available for additional seedings until 2011. We have seeded over 100 additional acres in 2011 and 2012.

In our operation the main advantage of Roundup-ready alfalfa is easier and cheaper weed control. The reason we need to control the weeds is for higher quality hay, longer stand life, and easier to harvest. We always sow alfalfa at a rate of 20 lbs per acre. The Roundup-ready seed will cost approximately \$150/acre, a top variety of conventional seed will cost about \$80/acre a difference of \$70/acre. We normally seed our alfalfa in the spring and spray it twice in the first year. The Roundup-ready alfalfa we spray twice with 24oz of Roundup each time with a cost of \$2.25 each with a total of \$4.50. The conventional alfalfa we spray with 16oz Select, 6oz Raptor, and 16oz 2, 4, DB for a cost of approximately \$60/application and a total of \$120 the first year. We have a savings of \$115 the first year with an increased seed cost of \$70 which leaves a net savings of \$45.

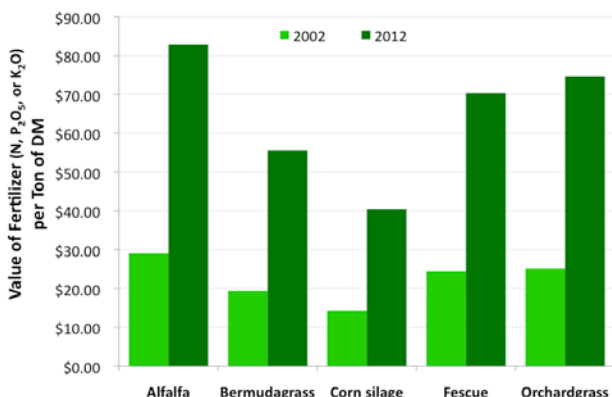
Some other advantages of Roundup-ready alfalfa is that we can lease fields with weed problems and we have more confidence in no-till alfalfa. Unless something unexpected changes, we plan to seed only Roundup Ready varieties in the future. (SOURCE: Clayton Gerald IN 33rd Kentucky Alfalfa Conference Proceedings, Vol. 33, #2, p. 10)

FORAGE CROPS FOR THE 21ST CENTURY

Abstract - Farmers today face many challenges in keeping their farm profitable in the ever changing marketplace. In the past the farmer obtained his profitability goal by utilizing well established varieties combined with good management practices. However as producers pushed that yield envelope, they found that at some point they had to start using improved genetic varieties to further maximize yield. In some cases they also had to utilize some of their marginal farm ground along with their best land to increase total production. In response to that need, Plant Breeders are now making available new varieties that not only push the yield potential higher, but also have new value added traits that enhance profitability. Many of these new varieties not only

have the potential of performing well on optimal soils but also have enhanced production on marginal soils. Below are just a few examples of the new traits being developed to enhance Forage crop production; (1) Improved Digestibility Factors, (2) Herbicide resistance (3) Fast Plant Recovery for Multiple Cutting Systems (4) Traffic and/or Compaction tolerance, (5) Grazing tolerance, (6) Salt tolerance (7) Drought tolerance, (8) Improved Winter Survival without losing yield potential, (9) Lodging tolerance (10) Resistance to New Diseases and Pests, (11) Tolerance to Plant Stress factors, (12) Enhanced Persistence, and (13) Improved Production on Marginal Soils. (SOURCE: Dr. Don Miller, Director of Product Development/Plant Breeder, Producer's Choice Seed IN 2011 AFGC Proceedings & Abstracts, French Lick, IN, June 13-15)

FERTILIZER: HOW MUCH IS IN EACH BALE?



Driven by increased fertilizer prices, the fertilizer value of a ton of forage has increased dramatically.

Table 1. Mineral content of selected forage species when harvested at recommended timing.[†]

	Phosphorus			Potassium		Ca	Mg
	N	P	P ₂ O ₅ [†]	K	K ₂ O [§]		
	----- (% of dry matter) -----						
Alfalfa	3.2	0.22	0.50	2.5	3.0	1.41	0.34
Bahiagrass	1.3	0.22	0.50	1.5	1.7	0.50	0.19
Bermudagrass	1.9	0.23	0.53	1.8	2.2	0.26	0.13
Brome	2.3	0.28	0.64	2.0	2.4	0.29	0.10
Corn silage	1.3	0.27	0.62	1.2	1.5	0.31	0.22
Fescue	2.2	0.37	0.85	2.3	2.8	0.51	0.27
Orchardgrass	2.0	0.34	0.78	2.9	3.5	0.27	0.11
Ryegrass, Annual	2.7	0.37	0.85	2.4	2.9	0.53	0.24
Timothy	1.7	0.29	0.66	2.4	2.9	0.51	0.13
Wheat straw	0.6	0.05	0.11	1.4	1.7	0.17	0.12

[†] Adapted from National Research Council's Feed Library.

[‡] Equivalent to phosphorus percentage reported on a fertilizer bag.

[§] Equivalent to potassium percentage reported on a fertilizer bag.

(SOURCE: Dr. Dennis Hancock, Extension Forage Specialist, University of Georgia IN 33rd Kentucky Alfalfa Conference Proceedings, Vol. 33, #2, pp. 11-24)

IMPACT OF THE ARKANSAS 300-DAY GRAZING PROGRAM

Abstract - In 2008, University of Arkansas Animal Science Extension specialists along with a county agent advisory committee developed the 300 Day Grazing Program to show producers how to extend the grazing season and reduce hay feeding to 65 days or less with improved grazing and forage management practices. The program emphasized demonstration of eight practices which were implemented on farms in 42 counties. Four farms used as many practices as necessary to achieve 300 days grazing or more per year. The direct savings to producers enrolled in the 300 Day Grazing Program was \$12,692 for 2008 - 2009 and \$114,825 for 2009 - 2010 for a total of

\$127,517. Over eighty presentations have been made at producer conferences detailing program results and article/interviews have been featured in six national or regional publications. The impact of the 300 Day Grazing program extends to more than farms conducting specific demonstrations and producers attending educational programs. New statewide grazing management practices such as Prescribed Grazing were implemented by NRCS and offered through the EQIP cost-share program. The results of the 300 Day Grazing Program served as a foundation to revise the Prescribed Grazing cost-share practice which is targeted at grazing systems. The Prescribed Grazing practice offers incentives to producers to implement rotational grazing, planting of legumes, proper hay feeding, stockpiling of forage, and other recommended forage management practices. A recent report from NRCS documented that more than 115,223 acres of grazing for livestock was managed to improve the quality and quantity of feed on 1,536 farms. Forage grasses were established on more than 7,310 acres to improve livestock nutrition and health on 408 farms. Almost one million feet of fencing and 316 water facilities were installed to improve grazing management on 240 farms. In 2010, producers received EQIP cost-share funds of over \$3.2 million for prescribed grazing, fencing, pasture planting, and improved watering facilities to improve grazing systems. The working relationship between Extension and NRCS and transfer of information on grazing programs is making a tremendous impact for Arkansas producers. (SOURCE: J. A. Jennings, K. J. Simon, T. R. Troxel, B. L. Barham, M. S. Gadberry, and S. M. Jones, Univ. of Arkansas IN 2011 AFGC Proceedings & Abstracts, French Lick, IN, June 13-15)

ADVANCED GRAZING SCHOOL

The 2nd Advanced Grazing School will be held at the UKREC in Princeton June 18, 2013. The Advanced Grazing School is a one-day course meant for those who have participated a previous grazing program. This program is meant to be used as a refresher course and to go more in depth on important forage and animal topics. Updates on new research through the University of Kentucky will also be presented by UK specialists.

8:30 Registration

Strip Grazing and Livestock Management - Dr. Donna Amaral-Phillips

Health Considerations for the Grazing Ruminant - Dr. Michelle Arnold

Summer Annual Forage Option - Dr. Ray Smith

Grazing Corn and Bermudagrass - Dr. Eric Vanzant

Lunch

Benefits of New Tall Fescue Varieties - Dr. Garry Lacefield

Management Tools for Tall Fescue - Dr. Glen Aiken

Benefits and Limitations of Herbicide Use in Pastures - Dr. JD Green

Ultra High Density Grazing - Dr. Jeff Lehmkuhler and Dr. Ray Smith

4:00 Final Discussion

4:30 Adjourn

Registration Information

Registration Fee: \$20.00 which includes all materials, breaks, and lunch.

Registration fee must be paid by July 2, 2012 to hold a place in the advanced grazing school.

Lodging: There are several hotels at the Hwy 60 exit off I-64 (Versailles/Frankfort, exit 58). This is the same exit to take to come to the Grazing School

Make checks payable to: **Kentucky Forage and Grassland Council** and send to **Land Dale, 176 Pasadena Drive, Lexington, KY 40503**

For more information, contact Land Dale, (859) 278-0899, e-mail: land.dale@uky.edu

UPCOMING EVENTS

- APR 17-18 Kentucky Grazing School, University of Kentucky Research & Education Center, Princeton
- MAY 22-24 American Forage & Grassland National Tour, Graves Mountain Lodge, Syria, VA
- JUN 18 Advanced Grazing School, UKREC, Princeton
- OCT 10 Kentucky Grazing Conference, Fayette County Extension Office, Lexington

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